

CLAIMS

1. A summary table manager for managing summary tables in an OLAP (OnLine Analytical Processing) database system, comprising:
 - a query analysis system that generates a set of proposed summary tables based on query statistics gathered for a set of inputted queries; and
 - a system for calculating a performance measure for each of the proposed summary tables based on the query statistics.
2. The summary table manager of claim 1, wherein the set of proposed summary tables is determined based on characteristics utilized in the set of inputted queries.
3. The summary table manager of claim 1, wherein the performance measure comprises an estimated amount of time saved for using the summary table.
4. The summary table manager of claim 1, wherein the performance measure is based on a combination of time saved and summary table size.
5. The summary table manager of claim 1, wherein the performance measure for each summary table is calculated based on performance data of characteristics relating to the summary table and performance data for any subsets of characteristics relating to the summary table.

6. The summary table manager of claim 1, further comprising a system for normalizing performance measures determined for summary tables that are based on different fact tables.

7. The summary table manager of claim 1, further comprising a performance analysis system that determines an actual performance value of a given summary table using feedback from the OLAP database system.

8. The summary table manager of claim 7, wherein the performance analysis system compares statistics for queries using identical characteristics that are obtained before and after creation of a summary table.

9. The summary table manager of claim 1, further comprising an evaluation system that automatically deletes low performing summary tables.

10. A program product stored on a recordable medium for managing summary tables in an OLAP (OnLine Analytical Processing) database system, comprising:

means for generating a set of proposed summary tables based on query statistics gathered for a set of inputted queries; and

means for calculating a performance measure for each of the proposed summary tables based on the query statistics.

11. The program product of claim 10, wherein the set of proposed summary tables is determined based on characteristics utilized in the set of inputted queries.

12. The program product of claim 10, wherein the performance measure comprises an estimated amount of time saved for using the summary table.

13. The program product of claim 10, wherein the performance measure is based on a combination of time saved and summary table size.

14. The program product of claim 10, wherein the performance measure for each summary table is calculated based on performance data of characteristics relating to the summary table and performance data for any subsets of characteristics relating to the summary table.

15. The program product of claim 10, further comprising means for normalizing performance measures determined for summary tables that are based on different fact tables.

16. The program product of claim 10, further comprising means for determining an actual performance value of a given summary table using feedback from the OLAP database system.

17. The program product of claim 16, wherein the determining means compares statistics for queries using identical characteristics that are obtained before and after the creation of a summary table.

18. The program product of claim 10, further comprising means for automatically deleting low performing summary tables.

19. A method for managing summary tables in an OLAP (OnLine Analytical Processing) database system, comprising:

generating a set of proposed summary tables based on query statistics gathered for a set of inputted queries; and

calculating a performance measure for each of the proposed summary tables based on the query statistics, wherein the performance measure for each summary table is calculated based on performance data of characteristics relating to the summary table and performance data for any subsets of characteristics relating to the summary table.

20. The method of claim 19, wherein the step of generating the set of proposed summary tables is determined based on characteristics utilized in the set of inputted queries.

21. The method of claim 19, wherein the performance measure comprises an estimated amount of time saved for using the summary table.

22. The method of claim 19, wherein the performance measure is based on a combination of time saved and summary table size.

23. The method of claim 19, comprising the further step of normalizing performance measures determined for summary tables that are based on different fact tables.

24. The method of claim 19, comprising the further step of determining an actual performance value of a given summary table using feedback from the OLAP database system.

25. The method of claim 24, wherein the step of determining the actual performance value compares statistics for queries using identical characteristics that are obtained before and after the creation of a summary table.

26. The method of claim 19, comprising the further step of automatically deleting low performing summary tables.